

### Remarks

Reconsideration and allowance of all of the claims now in the application is respectfully requested.

The examiner has rejected claims 1, 2, 5, 6, 9, 10, 11, 12, 15, 16, 19 and 20 under 35 USC § 103(a) as being unpatentable over European Patent Application Publication Number 0 686 920 to Jeong et al, hereinafter Jeong et al, The Microsoft Press Computer Dictionary, 3<sup>rd</sup> Edition, hereinafter Microsoft, and US Patent 6,463,266 to Shohara, hereinafter Shohara. This rejection is not thought to be well taken.

Claim 1 is a method claim and claim 11 is a structure claim corresponding in scope to claim 1, and the same references have been used in the rejection, so these two claims will be considered together. The examiner has cited Shohara as utilizing a phase rotator, which is true, but Shohara uses a phase rotator for an entirely different purpose in an entirely different way. Applicants, in claims 1 and 11, claim a phase rotation in conjunction with edge detection of the data. Shohara teaches the use of a phase rotator to phase shift complex I, Q signals to modulate quadrature (column 9, lines 41-50 and column.10, lines 13-19) which is a perfectly valid use of a phase rotator to phase shift complex I, Q signals. However, there is nothing in Shohara to teach or suggest the use of a phase rotator for edge detection as claimed in claims 1 and 11.

It is not enough that one may modify a reference in view of a second reference, but rather it is required that the second reference suggest modification of the first reference and not merely provide the capability of modifying the first reference.

The CAFC stated In re Piasecki, 745 F.2d 1468, 223 USPQ 785, 788 (Fed. Cir. 1984) the following:

"The Supreme Court in Graham v. John Deere Co., 383 U.S. 1 (1966), focused on the procedural and evidentiary processes in reaching a conclusion under Section 103. As adapted to ex parte procedure, Graham is interpreted as continuing to place the "burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103". Citing In re Warner, 379 F.2d 1011, 1020, 154 USPQ 173, 177 (CCPA 1967)."

The law is quite clear that in order for a claimed invention to be rejected on obviousness, the prior art must suggest the modifications sought to be patented; In re Gordon, 221 U.S.P.Q. 1125, 1127 (CAFC 1984); ACS Hospital System, Inc. v. Montefiore Hospital, 221 U.S.P.Q. 929, 933 (CAFC 1984). The foregoing principle of law has been followed in Aqua-Aerobic Systems, Inc. v. Richards of Rockford, Inc., 1 U.S.P.Q. 2d, 1945 (D.C. Illinois 1986). In the Aqua-Aerobic's case, the Court stated that the fact that a prior reference can be modified to show the claimed invention does not make the modification obvious unless the prior reference suggests the desirability of the modification. The CAFC in the case of In re Gorman, 18 U.S.P.Q. 2d (CAFC 1991) held at page 1888:

"When it is necessary to select elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or motivation in the prior art to make the selection made by the applicant [citation]. 'Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination [citations]. . .

The references themselves must provide some teaching whereby the applicant's combination would have been obvious."

Further, the CAFC, in In re Oetiker, 24 U.S.P.Q. 2nd 1443, 1445 (CAFC 1992) held:

There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That knowledge can not come from the applicant's invention itself.

Most significantly, the CAFC in the recent case of In re Dembiczak, 50 U.S.P.Q.2<sup>nd</sup> 1614 (CAFC 1999) held at 1617:

...(examiner can satisfy burden of obviousness in light of combination 'only by showing some objective teaching [leading to the combination]');

Thus, it is clear that where an individual reference does not teach the entire invention, then the modification which the invention represents must be suggested and motivated by some other reference through some objective teaching and cannot come from the application itself, which is not the case here.

Hence, claims, 1 and 11 are clearly allowable over any reasonable combination of Jeong et al, Microsoft and Shohara.

Claims 2, 5, 6, 9 and 10 are dependent upon claim 1 and claims 12, 15, 16, 19 and 20 are dependent upon claim 11, and, for the same reasons, are believed to be allowable.

Moreover, with respect to claims 10 and 20, there is nothing in any of the references which allows the use of multiple samples to determine the approximate center of the resulting data bit. This certainly is not suggested at page 10, lines 23-27 of Jeong et al which is completely silent about data boundaries and the use of multiple samples to determine the same. Thus, for this additional reason, claims 10 and 20 are allowable.

The examiner has rejected claims 3, 4, 13, and 14 under 35 USC 103(a) as being unpatentable over Jeong et al and Microsoft, and further in view of Gerowitz et al, US Patent 6,222,380, hereinafter Gerowitz et al. This rejection is not thought to be well taken. First of all claims 3, and 4 are dependent on claim 1 and claims 13 and 14 are dependent upon claim 11 and for the same reasons are believed to be allowable.

Additionally, none of the references teach or suggest phase rotation for any reason and, thus, this rejection must fail. Moreover, even the addition of Shohara does not overcome this defect since Shohara uses a phase rotator in a different way for a different purpose, as pointed out above. Additionally, it is not believed that Gerowitz et al teach or suggest

three separate sets of latches as claimed in claims 3 and 13. Thus, for this additional reason, claims 3 and 13 are believed to be allowable.

Claim 4 is dependent upon claim 3 and claim 14 is dependent upon claim 13 and, for the same reasons, these claims are believed to be allowable.

Claims 7 and 17 have been rejected under 35 USC § 103(a) as being unpatentable over Jeong et al, Microsoft and Shohara as applied in claims 1 and 11 and further in view of Hillis et al, US Patent 5,202,979, hereinafter Hillis et al. The rejection of these claims is not thought to be well taken. First, claim 7 is dependent on claim 1 and claim 17 is dependent upon claim 11 and for the same reasons are believed to be allowable.

Additionally, and as pointed out above, there is no phase rotation for any reason let alone for that which the applicants claim. Thus, for this reason, claims 7 and 17 are believed to be allowable. Moreover, there is absolutely nothing to suggest combining these four references as required (see citations *supra*). The addition of a fifth citation would only compound the problem. It is just not reasonable to pick and choose, without any direction from the references, various features from four or five references, and somehow "glue" them together to form applicants' invention as claimed.

Claims 8 and 18 have been rejected under 35 USC § 103(a) as being unpatentable over Jeong et al, Microsoft, Gerowitz et al and Hillis et al as applied in claims 7 and 17 and further in view of Newton's Telecom Dictionary, 8<sup>th</sup> Edition, hereinafter Newton. Again, these claims are dependent upon claims 1 and 11 respectively, and for the same reasons are believed to be allowable. Moreover, the addition of yet another reference further compounds the problem with respect to that pointed out regarding claims 7 and 17. The need to go to five or even six references seems itself to argue for allowability of the


claims. There is just no way all of these references can suggest that they can all be combined in such a way as to anticipate applicants' invention as claimed in claims 8 and 18.

In view of the above, it is believed that each of the claims now in the application is distinguishable one from the other and over the prior art. Therefore, reconsideration and allowance of each of the claims now in the application is respectfully requested.

Respectfully submitted,

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